CIRCULIT CLASS SPECIFICATION

Standard Colors

2700K 3000K 3500K

4000K 5000K

Standard CRIs

80 - 90

Module Codes

12 LED
G012NI084116-XXXX

32 LED
G032NI084116-XXXX

42 LED
G042NI032089-XXXX

Suitable for Architectural, downlight applications, High Bay, Pendants Indoor Lighting,

Launched in 3 versions: 12, 32, 42 LEDs.
Available in single-push connectors or pre-wired for easy installation
Designed, Engineered and Manufactured in the **USA**
A++ Energy efficacy class

2530 Calcite Circle, Newbury Park, CA 91320 USA | 805.499.9513 | sales@wcico.com | www.wcico.com

MADE IN CALIFORNIA

RING 12 LED

- Designed for downlights and area lights
- Suitable for DLC 4.0 and 5.0
- Made with latest LED chips with 80-90 CRIs and 3-step MacAdam ellipse
- Maximum efficiency and better heat dissipation
- UL recognized module and ROHS compliant
- Conformal coating available for outdoor application

1- Module Code

CCT	MODULE CODE	CCT	MODULE CODE
2700K	G012NI084116-2780-CC00	5000K	G012NI084116-5080-CC00
3000K	G012NI084116-3080-CC00	6000K	G012NI084116-6080-CC00
3500K	G012NI084116-3580-CC00	6500K	G012NI084116-6580-CC00
4000K	G012NI084116-4080-CC00		

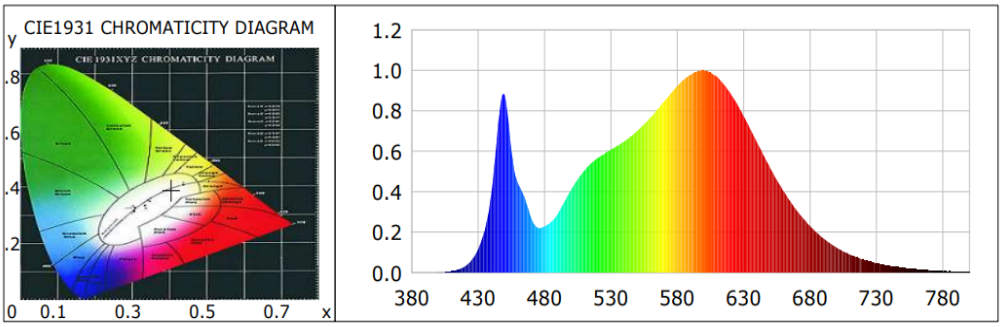
For 90 CRI modules the 80 changes to 90 (e.g. G012NI084116-2790-CC00)

2- Photometric Parameters

INDEX	CCT	Typical Rating	Max Rating
Flux	2700K	1868 lm	4704 lm
	3000K	1907 lm	4802 lm
	3500K	1946 lm	4900 lm
	4000K	2010 lm	5062 lm
Efficacy	2700K	156 lm/W	129 lm/W
	3000K	159 lm/W	132 lm/W
	3500K	164 lm/W	135 lm/W
	4000K	168 lm/W	139 lm/W
Forward CURRENT		350 mA	1000 mA
Forward VOLTAGE		34.2 Vdc	36.4 Vdc
POWER		12 W	36.4 W

All calculations are based on using Nichia 219 series 3-step chip, 80CRI in 25°C

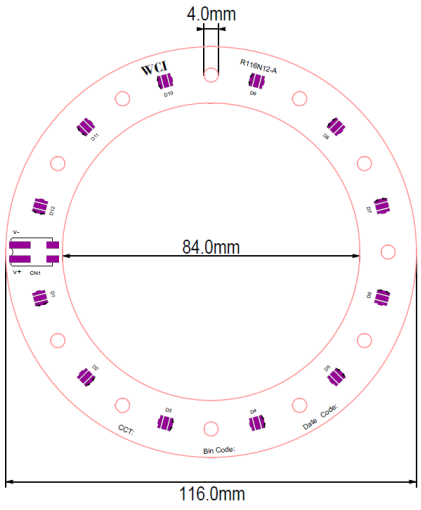
3- Light Source Test Report

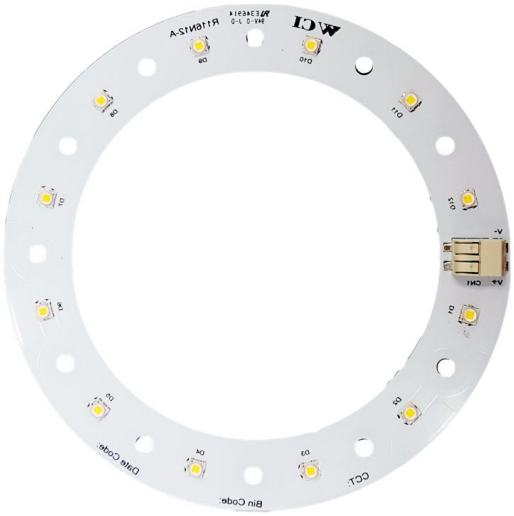


Energy Efficiency Class: A++ (EU 874-2012)

Chromaticity coordinates	x=0.4013 y=0.3884	**Color Ratio**	R=0.200 G=0.768 B=0.032
Peak Wavelength	599.2nm	**Half Bandwidth**	145.2nm
Dominant Wavelength	580.2nm	**Color Purity**	0.370
Color Quality Scale		Qa= 83.0, Qf= 83.2, Qp= 82.8, Qg= 92.7	

4- Module Dimension and Schematic





Schematic Circuit: 1S x 12LED =12 LEDs

RING 32 LED

- Designed for downlights and area lights
- Suitable for DLC 4.0 and 5.0
- Made with latest LED chips with 80-90 CRIs and 3-step MacAdam ellipse
- Maximum efficiency and better heat dissipation
- UL recognized module and ROHS compliant
- Conformal coating available for outdoor application
- Designed for high-lumen fixtures

1- Module Code

CCT	MODULE CODE	CCT	MODULE CODE
2700K	G032NI084116-2780-CC00	5000K	G032NI084116-5080-CC00
3000K	G032NI084116-3080-CC00	6000K	G032NI084116-6080-CC00
3500K	G032NI084116-3580-CC00	6500K	G032NI084116-6580-CC00
4000K	G032NI084116-4080-CC00		

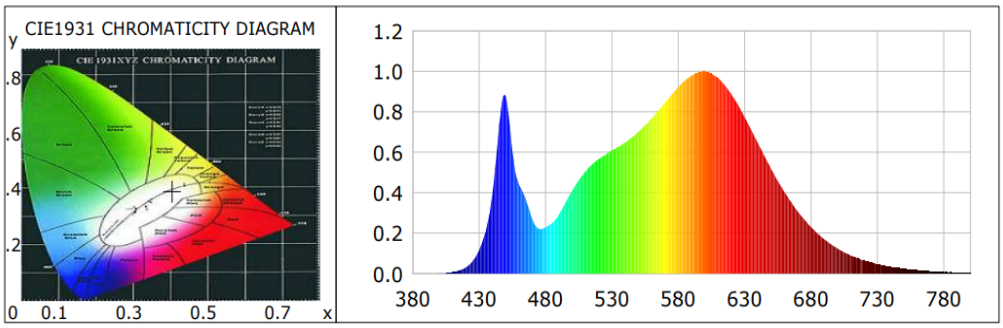
For 90 CRI modules the 80 changes to 90 (e.g. G032NI084116-2790-CC00*)*

2- Photometric Parameters

INDEX	CCT	Typical Rating	Max Rating
Flux	2700K	4982 lm	12544 lm
	3000K	5086 lm	12804 lm
	3500K	5188 lm	13064 lm
	4000K	5362 lm	13500 lm
Efficacy	2700K	156 lm/W	129 lm/W
	3000K	159 lm/W	132 lm/W
	3500K	163 lm/W	135 lm/W
	4000K	168 lm/W	139 lm/W
Forward CURRENT		700 mA	20000 mA
Forward VOLTAGE		45.6 Vdc	48.5 Vdc
POWER		16 W	48.5 W

All calculations are based on using Nichia 219 series 3-step chip, 80CRI in 25°C
The module is available in Samsung and Cree

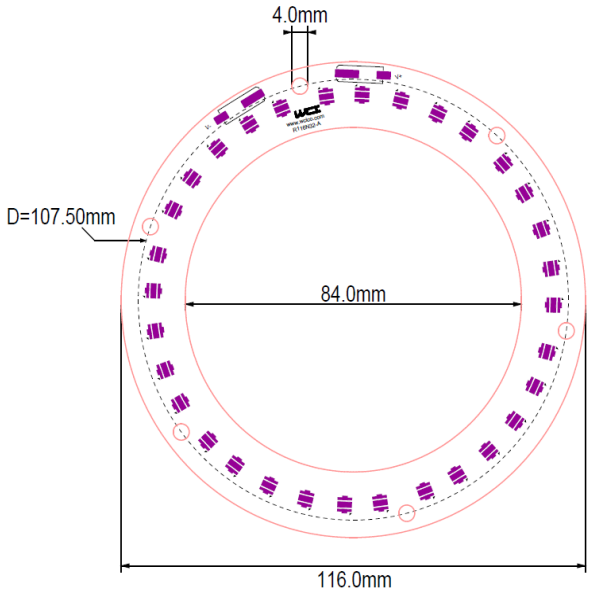
3- Light Source Test Report



Energy Efficiency Class: A++ (EU 874-2012)

Chromaticity coordinates	x=0.4013 y=0.3884	**Color Ratio**	R=0.200 G=0.768 B=0.032
Peak Wavelength	599.2nm	**Half Bandwidth**	145.2nm
Dominant Wavelength	580.2nm	**Color Purity**	0.370
Color Quality Scale		Qa= 83.0, Qf= 83.2, Qp= 82.8, Qg= 92.7	

4- Module Dimension and Schematic



Schematic Circuit: 2S x 16LED = 32 LEDs

DONUT 42 LED

- Designed for multipurpose linear projects specifically downlights
- Suitable for DLC 4.0 and 5.0
- Direct Current input
- Maximum efficiency and better heat dissipation
- UL recognized module and ROHS compliant
- Designed for high lumen application

1- Module Code

CCT	MODULE CODE	CCT	MODULE CODE
2700K	G042NI032089-2780-CC00	5000K	G042NI032089-5080-CC00
3000K	G042NI032089-3080-CC00	6000K	G042NI032089-6080-CC00
3500K	G042NI032089-3580-CC00	6500K	G042NI032089-6580-CC00
4000K	G042NI032089-4080-CC00		

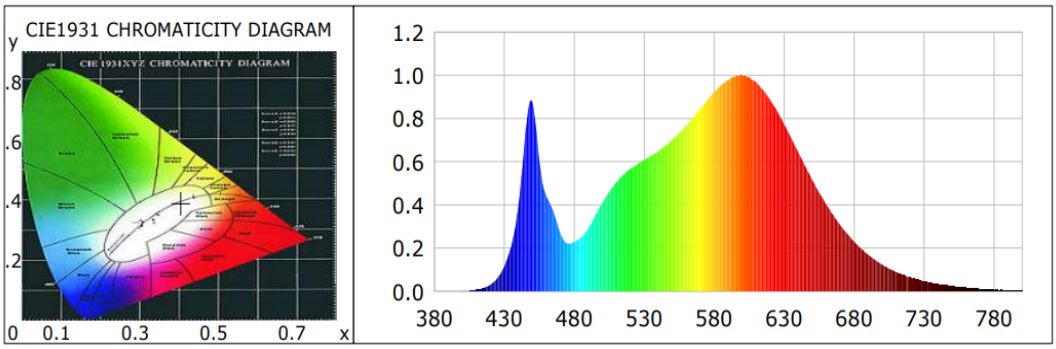
For 90 CRI modules the 80 changes to 90 (e.g. G042NI032089-2790-CC00)

2- Photometric Parameters

INDEX	CCT	Typical Rating	Max Rating
Flux	2700K	1419 lm	3435 lm
	3000K	1461 lm	3537 lm
	3500K	1494 lm	3615 lm
	4000K	1500 lm	3627 lm
	5000K	1554 lm1	3708 lm
Efficacy	2700K	182 lm/W	154 lm/W
	3000K	188 lm/W	159 lm/W
	3500K	192 lm/W	162 lm/W
	4000K	193 lm/W	163 lm/W
	5000K	200 lm/W	167 lm/W
Forward CURRENT		195 mA	500 mA
Forward VOLTAGE		39.9 Vdc	44.5 Vdc
POWER		7.8 W	22.3 W

All calculations are based on using Nichia 3-step chip, 80CRI in 25° C

3- Light Source Test Report



Energy Efficiency Class: A++ (EU 874-2012)

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Dominant Wavelength	580.2nm	**Color Purity**	0.370
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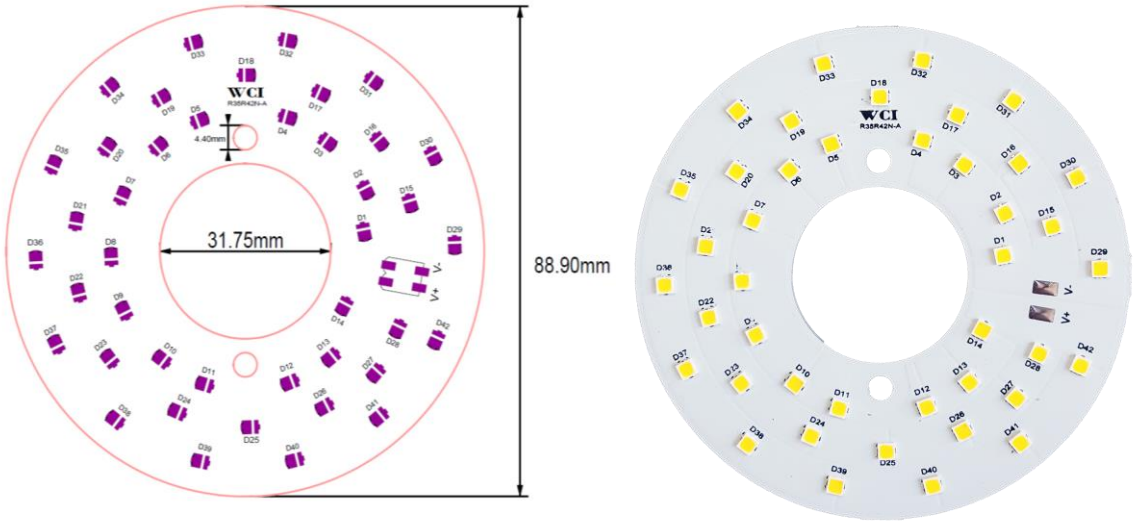
4- Module Dimension and Schematic



Schematic Circuit: 3S x 14LED =42 LEDs